

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number: 07977-0106004	
<p>I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, Box 1450, Alexandria, VA 22313-1450.</p> <p>Date of Deposit _____</p> <p>Signature _____</p> <p>Typed or Printed Name of Person Signing Certificate _____</p>		<p>Application Number 10/807,273</p> <p>First Named Inventor Shunpei Yamazaki et al.</p> <p>Art Unit 2871</p>	<p>Filed March 24, 2004</p> <p>Examiner Dung T. Nguyen</p>
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a Notice of Appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record 37640 (Reg. No.)</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34</p> <p> _____ Signature</p> <p>John F. Hayden _____ Typed or printed name</p> <p>(202) 783-5070 _____ Telephone number</p> <p>February 20, 2009 _____ Date</p>			
<p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.</p> <p><input type="checkbox"/> Total of _____ forms are submitted.</p>			

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Shunpei Yamazaki et al. Art Unit : 2871  
Serial No. : 10/807,273 Examiner : Dung T. Nguyen  
Filed : March 24, 2004 Conf. No. : 4114  
Title : LIQUID CRYSTAL ELECTRO-OPTIC DEVICE

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Pursuant to United States Patent and Trademark Office OG Notices: 12 July 2005 - New Pre-Appeal Brief Conference Pilot Program, a request for a review of identified matters on appeal is hereby submitted with the Notice of Appeal. Review of these identified matters by a panel of examiners is requested because the rejections of record are clearly not proper and are without basis, in view of a clear legal or factual deficiency in the rejections. All rights to address additional matters on appeal in any subsequent appeal brief are hereby reserved.

Claims 43-102 are pending in the application with claims 43, 47, 51, 55, 59, 64, 69, 74, 79, 83, 87, 91, 95 and 99 being independent. The claims have been rejected as being unpatentable over Kondo (JP 7-261181) in view of Funada (JP 53-048542).

Applicant specifically asks the panel to review the issues highlighted below:

One of ordinary skill in the art would have had no reason to modify the device of Kondo by adding a transparent conductive layer over the second substrate as allegedly shown by Funada, and because Kondo teaches away from such a modification.

Claim 43 recites a liquid crystal display device that includes a first substrate, a second substrate opposed to the first substrate, a thin film transistor formed over the first substrate, *a transparent conductive material formed over the second substrate*, and a liquid crystal layer interposed between the first substrate and the second substrate. Claim 43 further recites that long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device.

Kondo discloses a liquid crystal display device. Acknowledging that Kondo does not describe a transparent conductive material formed over the second substrate, the rejection relies on Funada as describing such a conductive material. The rejection further asserts that one would have modified Kondo's device in view of Funada in order to improve display characteristics and obtain a LCD with a fast response as discussed in the English translation of Funada at page 5, line 11. Applicant disagrees.

In the device of Kondo, an electric field is applied parallel with a substrate surface. By contrast, in the device of Funada, the electrode 4, which is allegedly formed from a transparent conductive material, is used to apply an electric field perpendicularly to a substrate surface. As such, since Kondo operates in a completely different way from Funada, there would have been no reason to incorporate Funada's electrode into Kondo's device.

In addition, as noted at paragraphs [0003] to [0008] of the full translation of Kondo, Kondo severely criticized devices that applied a vertical electric field (i.e., an electric field perpendicular to a substrate surface), and the very purpose of Kondo's device was to employ a horizontal electric field (i.e., an electric field parallel to a substrate surface) to solve the problems associated with vertical electric fields. Thus, Kondo affirmatively teaches away from the modification set forth in the rejection, and one of ordinary skill in the art would have had no reason to make that modification.

The rejection indicates that the modification would have been done in order to improve display characteristics and obtain an LCD with a fast response, and points to page 5, line 11 of the English translation of Funada. However, while that passage notes those benefits, it notes them as being benefits of the device of Funada, not as benefits of using the electrode 4. Thus, in view of these stated benefits, one of ordinary skill, at best, would have been motivated to replace Kondo's device with Funada's, not to modify Kondo's device in the manner set forth in the rejection.

The advisory action responds to arguments similar to those noted above by arguing that Funada discloses a vertical electric field together with a horizontal electric field, and that the modification therefore would have been obvious. While applicant agrees that Funada, in FIGS. 5-7, shows a device in which either a vertical field (as shown in FIG. 6) or a horizontal field (as shown in FIG. 7) may be applied, this in no way would have led to the modification of Kondo's

device to include the electrode of Funada. Moreover, if the device of Kondo were modified to include the vertical electric field of Funada, this would have resulted in a situation, as shown in FIG. 6 of Funada, in which long axes of liquid crystal molecules in the liquid crystal layer would not be kept parallel with a surface of the first substrate when not using the thin film transistor to drive the liquid crystal display device, which would be contrary to the recitation of claim 43.

As acknowledged by the Examiner, Funada does not describe a transparent conductive layer.

The rejection indicates Funada's electrode 4 is a transparent conductive layer. However, Funada provides no indication that this is the case. At page 3 of the office action of December 28, 2007, the Examiner acknowledges that Funada does not describe forming the electrode 4 from a transparent conductive material, but argues that such a material would be inherent in Funada's device:

"the Examiner agrees that Funada et al. do not explicitly disclose a transparent conductive based material for the electrode 4; however, Funada et al. do disclose a Guest-Host type LCD, i.e., kind of a transmissive LCD. Therefore, it is inherent to form a transparent conductive for electrodes in such Funada et al. LCD device."

Applicant disagrees with the Examiner's conclusion. In particular, Funada at, for example, page 5, lines 19-20 of the English translation, notes that Funada's device is a "reflective liquid crystal display." Accordingly, the electrode 4 could have been implemented with a reflective material, and it would not have been inherent to form the electrode 4 from a transparent material.

For at least the reasons presented above, the rejection of claim 43 and its dependent claims should be reversed.

Like claim 43, independent claims 47, 51, 55, 59, 64, 69 and 74 recite a transparent conductive material formed over a second substrate. Similarly, independent claims 79, 83, 87, 91, 95 and 99 recite a transparent conductive material over a liquid crystal layer such that the liquid crystal layer is located between the transparent conductive material and a substrate including a thin film transistor. Accordingly, the rejection of these claims and their dependent claims should also be reversed for the reasons discussed above.

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Applicant submits that all claims are in condition for allowance.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 2/20/09

  
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